PROGRAMMABLE PHASE INTERPOLATOR ADJUSTMENT FOR IDEAL DATA EYE SAMPLING

ABSTRACT OF THE DISCLOSURE

A clock recovery circuit includes a demodulator which generates in-phase and quadrature signals from a data signal and a phase adjuster which adjusts a phase of the quadrature signal independently from a phase of the in-phase clock signal. The phase adjustment causes a non-orthogonal relationship to exist between the phases of the quadrature and in-phase signals. The independent phase adjustment may be dynamically performed or may be performed in fixed increments to achieve a predetermined level of performance. In one application, the adjusted quadrature phase signal serves as a clock signal for controlling sampling of the data signal.